



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 5
 EMERGENCY RESPONSE BRANCH
 9311 GROH ROAD, ROOM 216
 GROSSE ILE, MI 48138-1697

AUG 01 1997

REPLY TO ATTENTION OF:

MEMORANDUM

SUBJECT: ACTION MEMORANDUM - Request for a Time-Critical Removal Action at the Metro Plating, Inc., Site, Detroit, Wayne County, Michigan (Site ID# B503)

FROM: Robert M. Buckley, On-Scene Coordinator
 Emergency Response Branch - Response Section 1

TO: William E. Muno, Director
 Superfund Division

THRU: Richard Karl, Chief
 Emergency and Enforcement Response Branch

I. PURPOSE

The purpose of this memorandum is to obtain your approval to expend up to \$387,000 to mitigate the imminent and substantial threat to public health, welfare, and the environment posed by the presence of hazardous wastes and hazardous substances in abandoned drums, subsurface structures, on the ground, and in soils located at the Metro Plating, Inc., (MPI) Site, 220 East Milwaukee Street, Detroit, Wayne County, Michigan.

This proposed removal action will eliminate the immediate threats posed by the presence of approximately 4,000 gallons of waste plating solutions exhibiting hazardous characteristics in some 14 vats and 2 pits. Proposed removal actions include assessment of the chemical hazards on the Site, stabilization of the hazardous wastes, decontamination/disposal of vats and drums, decontamination of contaminated floor/wall surfaces and off-site disposal of the hazardous wastes. The deteriorated condition of the vats and drums containing hazardous materials, the presence of hazardous waste on the ground, and the Site's proximity to residential and commercial areas require that this removal be classified as time critical. The project will require an estimated 60 days of on-site work to complete.

The Site is a prime candidate for redevelopment and is a high priority for both the Michigan Department of Natural Resources/Michigan Department of Environmental Quality (MDNR/MDEQ) and the City of Detroit's Planning and Development Department as a Brownfields initiative. These agencies believe



that as long as conditions remain the same, the Site will continue to be used for illegal dumping of both hazardous and non-hazardous wastes, for scrapping/salvaging operations and will serve as a deterrent to development in the area. The Site is located in the Detroit Empowerment Zone. This Site is also located not far from the proposed new location for City of Detroit offices in the General Motors Building. Nearby there are a number of sites which were subject to removal actions by the United States Environmental Protection Agency (U.S. EPA) or the State, including Saran Industries, Enterprise Oil, J.E. Berger and Comet Chrome, to name a few. The State and/or the City is in the process of remediation for reuse of these or similar sites.

The Site is not on the National Priorities List.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # MID 985 656 800 Lat. 42°22'19"N, Long. 083°04'30"W

The MPI Site is an abandoned chrome plating facility located at 220 East Milwaukee Street, Detroit, Wayne County, Michigan 48202. The Site consists of one two-story building that includes office space and storage on the upper level and several plating lines and storage areas on the lower level. The original building was built in 1942 with a concrete block addition in 1986. The building is situated in a commercial area and is bound to the north by Milwaukee Street, small commercial buildings, and grassy and parking areas. Paved parking areas and commercial buildings are located to the east of MPI. An alley, several commercial and abandoned buildings, a fenced area littered with debris, and a church are situated south of MPI. A grassy area, John R Street, an automotive repair shop, and additional commercial businesses are located west of MPI. There are many large office buildings, including the Fisher and General Motors buildings, located within 1 mile of the Site (see Figure 1 attached).

The Site is located in an environmental justice area. Based on 1990 U.S. Census data, the population of 15,483 within a 1-mile radius of the Site is 83 percent black. Median household income is \$12,768 and residences are 83.7 percent renter occupied. Within 1/4-mile of the Site, corresponding numbers are: 2,049 persons, 94.0 percent black, median household income \$13,536 and 77.0 percent renter occupied.

A City of Detroit site inspection on October 29, 1996, found that the facility operated as a small electroplating company under the name of Metro Plating, Inc., but had closed and was abandoned since the late 1980's. Property ownership is currently in the process of reverting to the State of Michigan due to nonpayment of taxes since 1988. To prevent access by trespassers, the City of Detroit placed plywood over the entrances to the building in June 1996 but during a site inspection in October 1996,

another City agency found that some of the plywood had been removed. On December 17, 1996, the City of Detroit requested assistance from U.S. EPA in assessing and cleaning up the Site.

On April 25, 1997, U.S. EPA and the Superfund Technical Assessment and Response Team (START) performed a site assessment at the MPI Site. The MDEQ representatives, Ray Spaulding and Jon Russell, were also present. An initial site reconnaissance of the outside of the building and the perimeter of the Site was conducted in level D personal protective equipment (PPE). After U.S. EPA, and MDEQ completed the initial site inspection, a man informed the U.S. EPA On-Scene Coordinator (OSC) that he was in the process of purchasing the building and that he had boarded up the building several times, but vandals continued to remove the boards and enter the building through a door on the south side of the building.

START donned level B PPE and conducted a site reconnaissance of the interior of the building. Access to the building was obtained through a missing overhead rollup door on the south side. There were few windows and no electrical lighting on the lower level, but the upper level contained numerous windows. The plating area on the lower level consisted of five rooms containing 14 vats and 13 drums. The upper level contained paperwork and debris and appeared to be an office area.

Air monitoring was conducted using a Micro flame ionization detector (MicroFID), MSA Passport (lower explosive limit [LEL], oxygen, hydrogen sulfide, and carbon monoxide), Draeger with a hydrogen cyanide sensor, Photovac Microtip photoionization detector (PID), and a Micro-R radiation meter. Readings above background levels on instrumentation were not detected during the site reconnaissance. START downgraded to level C PPE and began an inventory and preliminary waste characterization.

Room 1 is the largest room and is located on the east side of the building. It is the 1986 concrete block addition to the facility and contained only debris. The room to the west of Room 1, Room 2, contained the majority of the waste on site. Nine vats were located along the east wall of Room 2 in a sunken area of the floor. Two drums were located on the south wall, and a vat was located on the west wall. Two additional smaller vats and four drums were located on the north wall. Room 3, which is west of Room 2, contained two vats on a platform on the northwest corner. One drum containing residue was located in the center of Room 3. Room 4, which contained four drums along the north wall, is located to the north of Room 3. Room 5, which is located directly north of Room 2, contained only debris. A hallway, which connected Room 4 to Rooms 2 and 5, contained two drums (see Figure 2 attached).

START utilized pH paper to determine the pH of the contents of vats and drums. pH values ranged between 0 and 14 standard units (S.U.). Approximate dimensions of the containers, as well as the volume of material present, were recorded. START observed that liquid was present in the northern end of the sunken area or pit surrounding the nine vats. The liquid in the pit (sample MPF1) had a field pH between 10 and 11, and surrounded a vat (sample MPV9) which had material with a pH between 0 and 1. START continued waste inventory and characterization activities outside of the building. START located several drums scattered outside the building. There were approximately six drums in an unsecured, fenced area, attached to the south side of the building. A mound of soil was observed in another fenced area south of the alley and MPI. The fenced area was inaccessible and contained additional drums and vats.

After the inventory was completed, U.S. EPA determined that a total of seven samples would be collected from drums, vats, and soil at the Site. START proceeded to collect the seven samples. Sample MPV3, a black liquid, was collected from Vat 3 in Room 2. Sample MPV7, a green liquid, was collected from Vat 7 in Room 2. Sample MPV9, a yellow liquid, was collected from Vat 9 in Room 2. Sample MPF2, an orange liquid, was collected from the pit area in Room 2. Sample MPD2, a brownish-orange liquid, was collected from a polyethylene (poly) drum, Drum 2, in Room 2. Sample MPD19, an orange liquid, was collected from Drum 19 in the fenced area attached to the south wall of the building. Soil sample MPS1 was collected through the fence from the mound of soil south of the alley (see Table 1 attached).

Subsequent site monitoring has shown continued activity by trespassers on site despite the fencing and boarded up entrances around the Site.

III. TREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES

The documented conditions at the Metro Plating, Inc., Site meet the criteria for a removal action as stated in the National Contingency Plan (NCP) Section 300.415(b)(2), specifically:

- i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants;

Resource Conservation and Recovery Act (RCRA) hazardous wastes with characteristics of corrosivity have been identified at the Site. Samples MPV3 and MPV9 had pH levels less than 1 S.U. Sample MPD2 had a pH level greater than 12.5 S.U. All of these are liquids staged in open-topped drums or vats. The building is not secure, and trespassers or vandals can easily come in contact with the corrosive liquids.

Vat 9, from which sample MPV9 was collected, is surrounded by fluid with a pH between 10 and 11. The corrosive nature of the liquid makes the breakdown of Vat 9 likely, which would result in a violent reaction when the acid in Vat 9 and the base in the pit mix.

Many of the vats also contain elevated levels of chromium, nickel, and copper. Trespassers or vandals are at risk of dermal contact with the liquid contained in the vats, drums, and pit area. There is no electricity in the building and few windows. A person could easily fall into a vat or pit and contact hazardous materials. During the site assessment, evidence of the presence of transient or homeless people living or seeking shelter in the building was observed. Such individuals and all trespassers are at severe risk of contamination through direct contact.

The main entrances to the building have been secured by the City of Detroit with plywood; however, some of the plywood has been removed by trespassers and vandals. This ease of access provides ample opportunity for exposure to hazardous materials by both humans and animals that enter the building.

Vandals and individuals scavenging the building for saleable scrap could salvage the metal from a contaminated vat. Any such activity could release hazardous liquids from the vats and drums to the environment. Vandals may also tamper with, mix, and/or mishandle the chemicals which may prove to be harmful or even fatal.

- ii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release;

Many of the drums staged at the MPI Site have deteriorated. The deterioration of the drums and vats creates a threat of release of hazardous materials into the environment. The contents of many drums and vats are unknown at this time. Many drums were unlabeled and the properties of the contents were unknown.

- iii) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

The MPI Site had many drums staged outside and exposed to the environment. This would cause the deterioration of the drums to occur more rapidly. The drums staged outside are also more accessible to vandals or trespassers. An attempt to salvage the drums could cause the release of corrosive contents.

The MPI building is vacant and abandoned, and all utilities have been shut off. This exposes the vats and drums and their contents to extreme temperatures and seasonal freeze/thaw cycles. These annual fluctuations serve only to increase the likelihood of future vat and drum rupturing or content overflow.

There is evidence in the past of large spills throughout the Site and there is the potential for off-site migration of contaminants via airborne dust or surface runoff. The deteriorated condition of the building allows rainwater and snow into the building during all precipitation events. As many of the drums and small containers are open-topped, rainwater or snowmelt water entering through the roof can also cause incompatible substances such as acids and bases, as well as other chemicals, to overflow their containers and become mixed or migrate off site.

iv) Threat of fire or explosion;

The contents of drums, containers, surface spillage, vats, and pits may be combustible or ignitable. A potential for these materials and other site hazardous waste to be incompatible exists and, if spilled or mixed, could result in an exothermic reaction or explosion and fire, or the explosive release of toxic gases. Vandals, trespassers, or security personnel entering the facility grounds or buildings could ignite fires by carelessness (i.e., smoking, not containerizing cigarette butts).

v) The availability of other appropriate Federal or State response mechanisms to respond to the release;

Assistance will not otherwise be provided on a timely basis because neither the State nor local government has indicated the resources and, in the case of the City, the experience to deal with this Site. The inability or unwillingness of Potentially Responsible Parties to undertake the site cleanup is discussed in the attached Confidential Enforcement Addendum.

IV. ENDANGERMENT DETERMINATION

The current conditions at the MPI Site, the nature of the hazardous substances on site, and the potential exposure pathways to the nearby populations described in Sections II and III, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment if not addressed by implementing the response actions selected in this Action Memorandum. Implementation of the response actions selected in this Action Memorandum will mitigate the actual or threatened releases of hazardous substances from this Site.

The threats to human health and the environment on the MPI Site include the presence of corrosive liquids and high concentrations of heavy metals in deteriorating containers.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The following removal activities are proposed to alleviate the potential and actual threats to human health and the environment posed by the hazardous contaminants at the MPI Site:

- 1) Establish and maintain site security as needed throughout response activities;
- 2) Develop and implement a site health and safety plan;
- 3) Secure all vats and drums in the on-site building;
- 4) Identify, inventory, and characterize hazardous wastes found in vats, drums, and other containers found on site;
- 5) Segregate incompatible materials;
- 6) Remove contaminated soil and sludges found on site;
- 7) Consolidate contaminated debris for disposal;
- 8) Transport and dispose of hazardous waste in compliance with U.S. EPA's Off-Site Rule (40 CFR § 300.440);
- 9) Conduct a limited extent-of-contamination (EOC) study of the on-site soils in the vicinity of all surface spillage.
- 10) Dispose of highly contaminated soil identified in the EOC.

The removal action will be conducted in a manner not inconsistent with the National Contingency Plan (NCP). The OSC has initiated planning for provision of post-removal site control consistent with the provisions of Section 300.415(1) of the NCP.

Elimination of all surface threats is, however, expected to minimize the need for post-removal site control. As more is learned about the site characteristics, further evaluation will continue regarding additional removal funding for this response action or the need to change to a non-time critical or remedial mode. The OSC is in the process of coordinating integrated site assessment activities to facilitate these evaluations.

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage or disposal shall be treated, stored, or disposed of at a

facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR § 300.440, 58 Federal Register 49215 (Sept. 22, 1993).

The removal action will be conducted in a manner to obtain and preserve information and evidence which may be of use to ongoing civil and criminal investigations on the disposal of wastes on the Site. Actions will also be coordinated with State and City agencies to facilitate an orderly transition to their planned FY97 and FY98 remedial activities.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and substantial endangerment to public health and safety and the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

The estimated costs to complete the above activities are summarized below. These activities will require an estimated 60 on-site working days to complete. Detailed cleanup contractor cost estimates are presented in Attachment 1.

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:

Cleanup Contractor Costs	\$ 206,000
Contingency (15%)	<u>31,000</u>
Subtotal	\$ 237,000
START	<u>35,000</u>
Extramural Subtotal	\$ 272,000
Extramural Contingency (20%)	<u>55,000</u>
TOTAL, EXTRAMURAL COSTS	\$ 327,000

INTRAMURAL COSTS:

U.S. EPA Direct Costs	
\$30 x (600 Regional hours plus 60 HQ hours)	\$ 19,800
U.S. EPA Indirect Costs	
(\$65 x 600 Regional hours)	\$ 39,000
U.S. EPA Other Costs	<u>\$ 1,200</u>
TOTAL, INTRAMURAL COSTS	\$ 60,000
TOTAL REMOVAL PROJECT CEILING ESTIMATE	\$ 387,000

All applicable or relevant and appropriate requirements (ARARs) of Federal and State law will be complied with to the extent practicable. A letter was sent on June 26, 1997, to Jon Russell, Project Manager, Michigan Department of Environmental Quality, requesting that he identify State ARARs. A response was received July 7, 1997. State ARARs identified for this removal action will be complied with to the extent practicable.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed or non-action may result in an increased likelihood of direct contact threat to human or wildlife populations accessing the Site. Damaged and decaying containers of hazardous substances and hazardous wastes may further deteriorate to the point of releasing their contents allowing greater potential for direct contact or emissions of harmful vapors.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues for the MPI Site.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in an Enforcement Confidential Addendum.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Metro Plating Inc Site in Detroit, Wayne County, Michigan, developed in accordance with CERCLA as amended by SARA, and is not inconsistent with the NCP. This decision is based on the information in the Administrative Record for the Site. Conditions at the Site meet the NCP § 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action. The total project ceiling, if approved, will be \$387,000. Of this, an estimated \$292,000 may be used for extramural cleanup contractor costs. You may indicate your decision by signing below.

APPROVE: Richard C Karl for Wey DATE: 8-1-97
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum**Attachments:**

1. Detailed Cleanup Contractor Estimate
2. Administrative Record Index
3. Table 1 - Site Assessment Data
4. Figure 1 - Site Features Schematic
5. Figure 2 - Building Schematic

cc: K. Mould, U.S. EPA, 5202-G
D. Henne, U.S. Department of the Interior
A. Howard, MDEQ, Lansing

BCC: PAGE
1 PAGE

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ENFORCEMENT ADDENDUM
JULY 1997
1 PAGE

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT 1

DETAILED CLEANUP CONTRACTOR ESTIMATE
METRO PLATING INC
DETROIT, WAYNE COUNTY, MICHIGAN
JULY 1997

Cost Projection Summary:

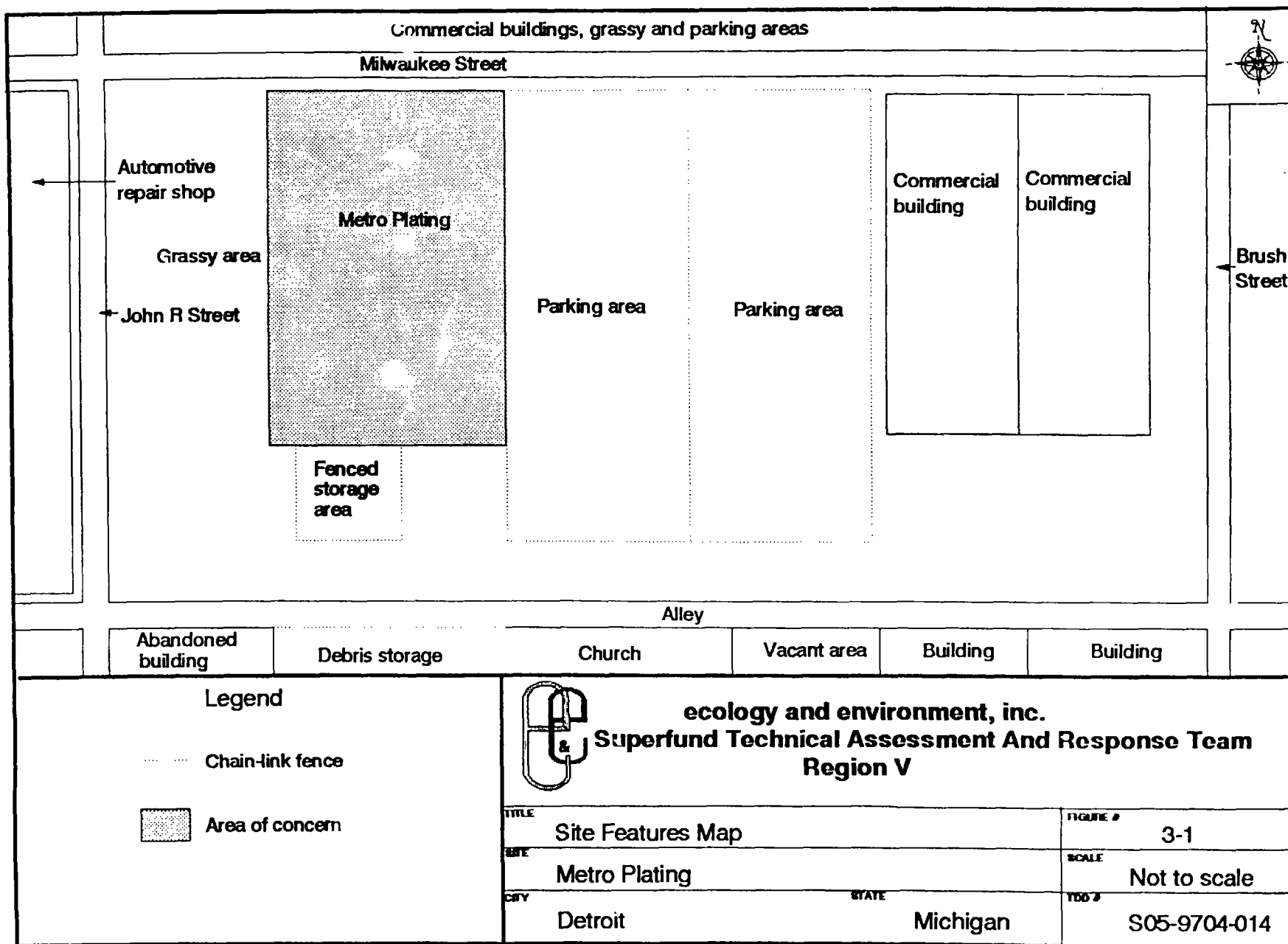
Contractor personnel	\$ 86,000
Contractor equipment	19,000
Materials UR/AC	12,000
Subcontractors	16,000
Waste transportation	13,000
Disposal	50,000
Analytical	<u>10,000</u>
Subtotal	\$206,000

ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTIONADMINISTRATIVE RECORD
FOR
METRO PLATING INC. SITE
DETROIT, WAYNE COUNTY, MICHIGANORIGINAL
JULY 17, 1997

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	12/17/96	Lile, S., City of Detroit	El-Zein, J., U.S. EPA	Letter re: City of Detroit's Request for U.S. EPA Assistance at the Metro Plating Site	10
2	06/01/97	Ecology and Environment, Inc.	U.S. EPA	Site Assessment Report for the Metro Plating Site	43
3	06/26/97	Buckley, R., U.S. EPA	Russell, J., MDEQ	Letter re: U.S. EPA's Request for Michigan ARARs for the Metro Plating Site	1
4	07/01/97	Russell, J., MDEQ	Buckley, R., U.S. EPA	Letter Forwarding Attached Michigan ARARs for the Metro Plating Site	195
5	00/00/00	Muno, W., U.S. EPA	Buckley, R., U.S. EPA	Action Memorandum: Request for a Time- Critical Removal Action at the Metro Plating Site	

Figure 1 - From Site Assessment Report



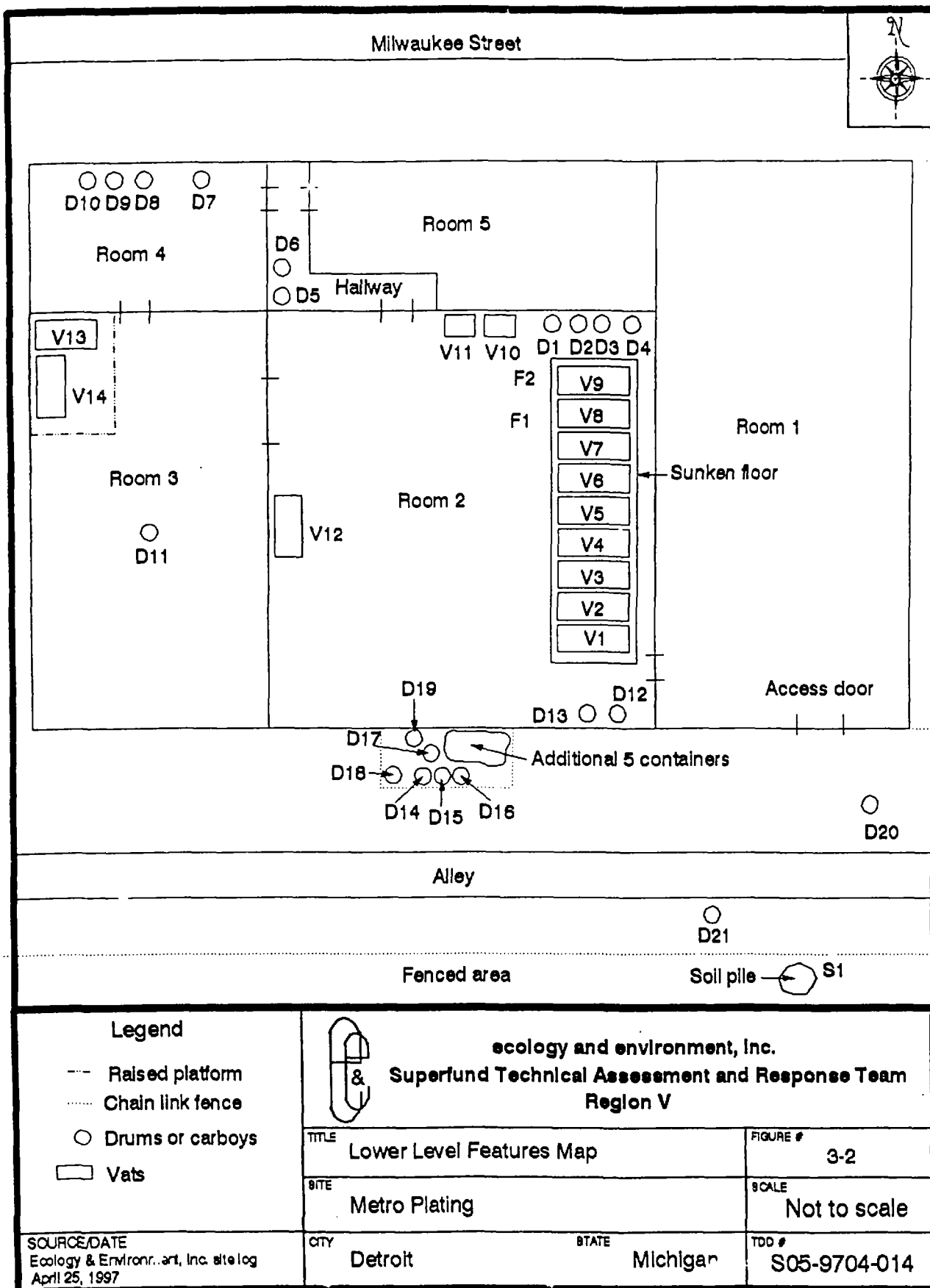


Figure 2 - From Site Assessment Report

Table 1 - From Site Assessment Report
pH, CYANIDE, AND TCLP RCRA METALS ANALYTICAL RESULTS
METRO PLATING SITE
APRIL 25, 1997

Parameter	Regulatory Limit	Sample Identification						
		MPV3	MPV7	MPV9	MPP2	MPD2	MPD19	MPS1
pH (standard units)	pH \leq 2, pH \geq 12.5	0.37	6.56	0.09	10.5	13.2	10.5	9.39
Total Cyanide (mg/kg)	None	BDL	BDL	NA	BDL	BDL	BDL	BDL
Reactive Cyanide (mg/kg)	None	BDL	BDL	NA	BDL	BDL	BDL	BDL
Total Iron (mg/L)	None	17,200	BDL	BDL	BDL	763	443	78,000
Arsenic (mg/L)	5.0 mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Barium (mg/L)	100.0 mg/L	BDL	BDL	0.13	0.32	0.96	2.96	0.52
Cadmium (mg/L)	1.0 mg/L	BDL	BDL	BDL	BDL	2.28	0.16	BDL
Chromium (mg/L)	5.0 mg/L	360,000	BDL	BDL	1.60	38.1	7.70	BDL
Copper (mg/L)	100 mg/L	4,680	0.12	4.78	12.6	56.0	204	7.10
Lead (mg/L)	5.0 mg/L	BDL	BDL	0.81	BDL	7.70	1.20	BDL
Mercury (mg/L)	0.2 mg/L	0.077	BDL	BDL	BDL	BDL	BDL	BDL
Nickel (mg/L)	None	12,200	1,810	1.29	2.64	60.5	74.5	116
Selenium (mg/L)	1.0 mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Silver (mg/L)	5.0 mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc (mg/L)	500 mg/L	500	0.79	1.38	BDL	35,800	23.0	20.3

Key: mg/L = Milligrams per liter.
BDL = Not detected.
mg/kg = Milligrams per kilogram.
NA = Not analyzed.

Source: National Environmental Testing, Inc.
Analytical TOD: S05-9704-811.

POPULATION SUMMARY

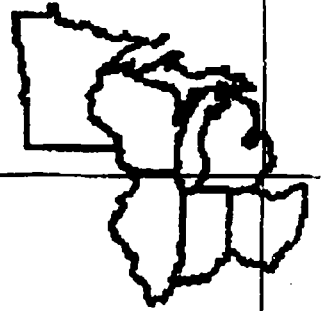
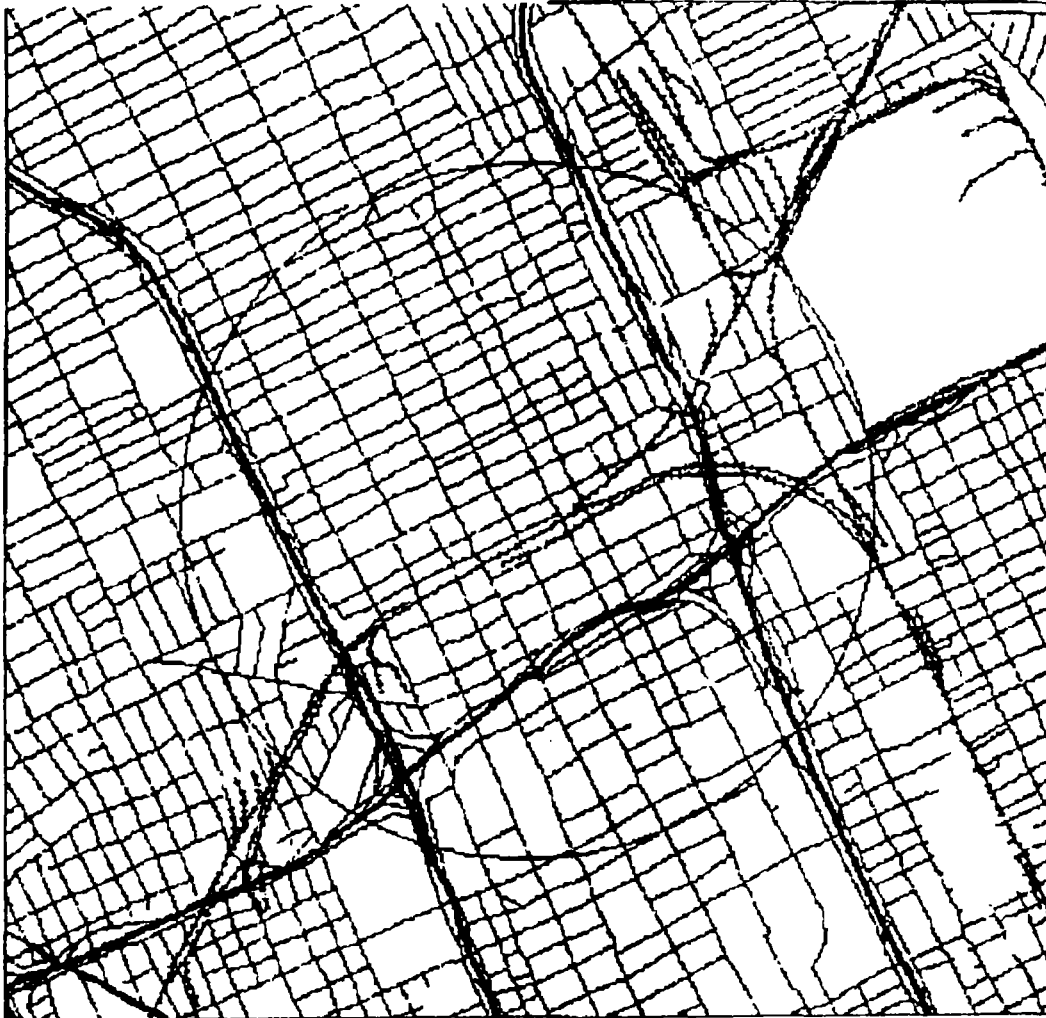
LOCATION	:	1.0 mi. radius at 42.370131, -83.069373
# BLOCK GROUPS INCLUDED	:	34
NUMBER OF PERSONS	:	15483
NUMBER OF FAMILIES	:	2829
NUMBER OF HOUSEHOLDS	:	7744
MEDIAN (EST.) HOUSEHOLD INCOME:	:	12768
AGE 0 THRU 4	:	997
AGE 5 THRU 9	:	745
AGE 10 THRU 19	:	1537
AGE 20 THRU 49	:	7645
AGE 50 THRU 64	:	1939
AGE 65 AND OVER	:	2620
WHITE	:	1752
BLACK	:	12844
INDIAN	:	65
ASIAN	:	694
OTHER RACE	:	128
HISPANIC	:	227
OWNER OCCUPIED	:	1261
RENTER OCCUPIED	:	6483
PERCENT AGE 0 THRU 4	:	6.4
PERCENT AGE 5 THRU 9	:	4.8
PERCENT AGE 10 THRU 19	:	9.9
PERCENT AGE 20 THRU 49	:	49.4
PERCENT AGE 50 THRU 64	:	12.5
PERCENT AGE 65 AND OVER	:	16.9
PERCENT WHITE	:	11.3
PERCENT BLACK	:	83.0
PERCENT INDIAN	:	0.4
PERCENT ASIAN	:	4.5
PERCENT HISPANIC	:	1.5
PERCENT OTHER RACE	:	0.8
PERCENT OWNER OCCUPIED	:	16.3
PERCENT RENTER OCCUPIED	:	83.7

1"=0.5mi

3.00 by

2.91 miles

42.22.12/- 83.04.09



01: Region 5 U. S. EPA

- ☐ U. S. MAP
- ☐ STATES
- ☐ COUNTIES
- ☒ MAJOR ROADS (from TIGER)
- ☒ WATER (from TIGER)
- ☒ SHORELINE (from TIGER)
- ☒ RAILROADS (from TIGER)
- ☒ MINOR ROADS (from TIGER)

Mon Jun 23 09:44:48 1997

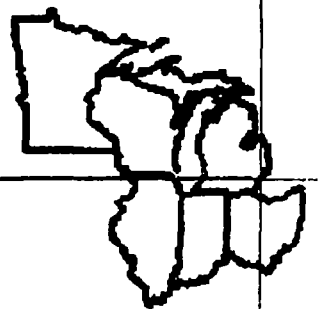
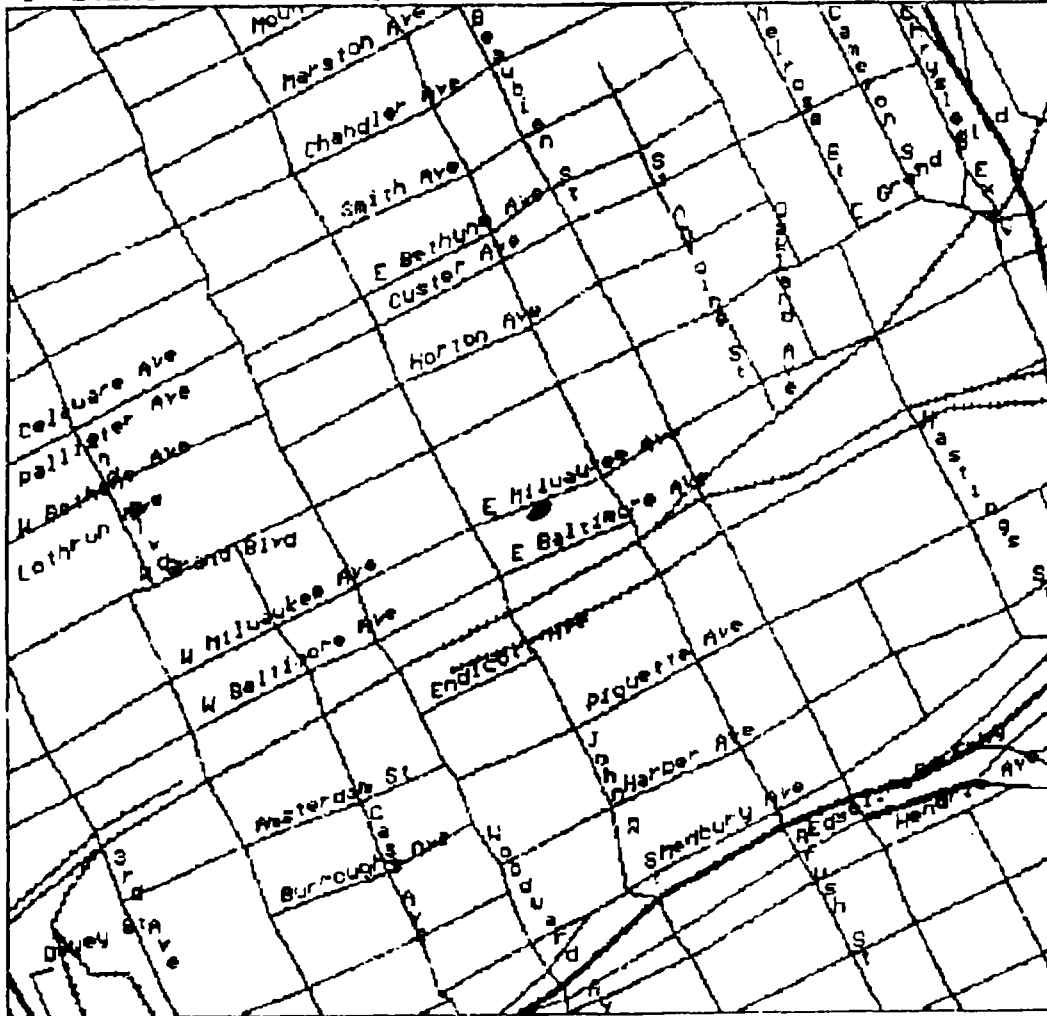
POPULATION SUMMARY

LOCATION	:	0.5 mi. radius at 42.370131, -83.069373
# BLOCK GROUPS INCLUDED	:	8
NUMBER OF PERSONS	:	2049
NUMBER OF FAMILIES	:	365
NUMBER OF HOUSEHOLDS	:	978
MEDIAN (EST.) HOUSEHOLD INCOME:		13536
AGE 0 THRU 4	:	127
AGE 5 THRU 9	:	100
AGE 10 THRU 19	:	188
AGE 20 THRU 49	:	961
AGE 50 THRU 64	:	301
AGE 65 AND OVER	:	372
WHITE	:	117
BLACK	:	1926
INDIAN	:	2
ASIAN	:	2
OTHER RACE	:	2
HISPANIC	:	4
OWNER OCCUPIED	:	225
RENTER OCCUPIED	:	753
PERCENT AGE 0 THRU 4	:	6.2
PERCENT AGE 5 THRU 9	:	4.9
PERCENT AGE 10 THRU 19	:	9.2
PERCENT AGE 20 THRU 49	:	46.9
PERCENT AGE 50 THRU 64	:	14.7
PERCENT AGE 65 AND OVER	:	18.2
PERCENT WHITE	:	5.7
PERCENT BLACK	:	94.0
PERCENT INDIAN	:	0.1
PERCENT ASIAN	:	0.1
PERCENT HISPANIC	:	0.2
PERCENT OTHER RACE	:	0.1
PERCENT OWNER OCCUPIED	:	23.0
PERCENT RENTER OCCUPIED	:	77.0

1"=0.2mi

1.00 by 0.97 miles

42.22.12/- 83.04.09



01: Region 5 U. S. EP

- ☐ U. S. MAP
- ☐ STATES
- ☐ COUNTIES
- ☒ MAJOR ROADS (from TIGER)
- ☒ RAILROADS (from TIGER)
- ☒ MINOR ROADS (from TIGER)

Mon Jun 23 2014 7:10 1897

INDEPENDENT GOVERNMENT COST ESTIMATE

METRO PLATING INC DETROIT, WAYNE COUNTY, MICHIGAN JULY 1997

Cost Projection Summary:

Contractor personnel	\$ 86,000
Contractor equipment	19,000
Materials UR/AC	12,000
Subcontractors	16,000
Waste transportation	13,000
Disposal	50,000
Analytical	<u>10,000</u>
Subtotal	\$206,000

Contingency	31,000
START total	<u>35,000</u>
Subtotal	\$272,000

Extra mural contingency	<u>55,000</u>
TOTAL extramural costs	\$327,000

U.S. EPA direct	19,800
U.S. EPA indirect	39,000
U.S. EPA other	<u>1,200</u>
Subtotal	60,000

Total removal project ceiling	\$ 387,000
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Project Scope:

<u>Task</u>	<u>Step/Milestone</u>	<u>Duration</u>	<u>Cost</u>
A	General site costs	60 days	\$ 91,000
B	Stage/sample/consolidate	20 days	64,000
C	Transport, dispose	20 days	196,000
D	Decon floors/walls/equipment	20 days	<u>36,000</u>
			\$ 387,000

Cost projections include:

60 days/10 hours for U.S. EPA, START, and ERCS RM and clerk.

Utilities - phone, electric, portajohns for 2 months; site security off hours watchman for 8 weeks.

Lodging and per diem are not projected.

Disposal costs were estimated for some 5600 gallons of liquids and various solids including ppe, drums, debris and scrap metal.

The attached detailed cost summary was prepared using RCMS Cost Projection Program. For inclusion in action memo, costs were rounded to the next thousand dollars. In addition, certain categories were increased upon review of the detailed projection without rerunning the program. These include contractor equipment

by \$5k, transportation and disposal by \$2k (some \$8.5k was also transferred from disposal to transport), materials by \$2k and subcontractors by \$2k. START costs were increased by \$4k and U.S. EPA costs were increased by \$30k to include indirect costs, HQ direct and other costs.

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 Cost Summary

Page: 1

Projection Name: Metro Plating Site

Date: 05/30/97

Projection Type: Initial

Prime Contractor: RES5
 =====

	Projection	Archive	Total
CONTRACTOR			
Personnel Cost	85625	0	85625
Equipment Cost	14508	0	14508
Other Direct Cost	94500	0	94500
	-----	-----	-----
Total for Contractor	194633	0	194633
Contractor Contingency:15.00%			29195

Including Contractor Contingency			223828
Site Contingency:20.00%			38927

Including Site Contingency			262755
GOVERNMENT			
Personnel Cost	48000	0	48000
Equipment Cost	1000	0	1000
Other Direct Cost	0	0	0
	-----	-----	-----
Total for Government	49000	0	49000
Site Contingency: 20.00%			9800

Including Site Contingency			58800
			=====
PROJECT TOTAL			321555

CONTRACTOR COSTS BY TASK CODE
12 PAGES

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION